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Amendment
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In the Claims

1. (Currently Amended) A motor controller for a motor-driven pump, the controller having at least one voltage sensor and at least one current sensor and configured to:
receive a voltage and a current signal of the pump in operation from the at least one voltage sensor and the at least one current sensor;
determine a power signal from the voltage signal and the current signal;
generate a real-time spectrum analysis of the power signal;
determine undesirable torque conditions in the pump from the spectrum analysis;
and
automatically disable the pump if the undesirable torque condition exceeds a threshold. [[.]]
2. (Original) The motor controller of claim 1 further configured to automatically provide an external indication of the undesirable torque condition in the pump.
3. (Canceled)
4. (Original) The motor controller of claim 1 further configured to apply an FFT to the power signal.
5. (Original) The motor controller of claim 1 further configured to band-pass filter the power signal.
6. (Original) The motor controller of claim 1 further configured to generate a model spectrum analysis of the pump during healthy operation and determine the undesirable torque condition in the pump by comparing the model to the real-time spectrum analysis.
7. (Original) The motor controller of claim 1 wherein the undesirable torque condition is defined by at least one of misalignment of the pump and mechanical interferences in the pump.